

REMARKS

As of the Office Action dated December 2, 2004, claims 1-12 are pending. Claims 1-12 stand rejected under 35 U.S.C § 103(a). Claim 1 has been amended to correct a clerical error. No new matter has been introduced.

Applicants kindly requests that the Examiner reconsider the rejection of claims 1-12 in view of the arguments presented below:

35 U.S.C. §103(a)

The Examiner rejected claims 1-12 under 35 U.S.C. §103 (a) as being unpatentable over EP Pub. 0 511 671 A2 to Naito et al. (hereinafter Naito) in view of U.S. Pat. No. 6,598,304 B1 to Kloth (hereinafter Kloth).

Independent Claims 1 and 8

The Examiner states that Naito discloses the step of processing first data units originating from the external network facility to recover first packets transported by the first data units. Applicants respectfully disagree.

Naito is directed to a system for monitoring an ATM cross-connecting apparatus by inputting a test cell into an ATM switching device and examining the cell after the cell passes through this ATM switch.

The passages in Naito cited by the Examiner as disclosing processing first data units originating from the external network facility, e.g., Figure 2, abstract, and page 4, lines 39-50, do not describe nor suggest the features as recited in claims 1 and 8, particularly the recovering of first packets from the first data units. For example, these cited portions of Naito disclose and show an ATM cross-connecting apparatus where “an incoming cell transferred from another node or a terminal is received by the receiving unit 1ia (i=1 to n) in each interface unit 1i, and is multiplexed therein. Then, a virtual path identifier (VPI) in each cell is replaced with another virtual path identifier (VPI) corresponding to a virtual path through which the cell is to be output to a next node” (Naito, page 4, lines 44-47).

Here, Naito proposes processing ATM cells (i.e., data units) in order to multiplex the ATM cells. In addition, Naito is limited to teaching the processing of ATM cells only,

whereas applicant's claims do not recite any such format limitation in its processing of data units. What Naito describes is merely the processing of ATM cells originating from a test cell generating unit 200, processing ATM cells from the test traffic generator by tagging ATM test cells to distinguish them from ATM data cells, then multiplexing and transmitting them into the switching system. Thus, the Office Action likens the ATM data cells and receiving unit of Naito to the Applicants' first data units and first interface module, respectively. However, Naito discloses that an ATM data cell that is transferred from another node is received by the receiving unit (e.g., 1ia' in Fig. 6) and temporarily written to a buffer memory of the ATM reception processing unit 102, after which the data cell in the buffer memory is transferred to the selector 103. Thus, Naito never describes nor suggests that data units transferred from another node are processed so as to recover first packets. Further, Naito does not disclose, teach or suggest the multiplexing of the first data packet (retrieved from the first data unit) with second data packets. To the contrary, Naito describes the multiplexing of ATM cells (i.e., data units), not data packets, and Naito's teaching is further limited to the processing and multiplexing of ATM cells only.

In fact, Naito closely resembles applicant's description of the background art as shown in Figures 1 and 2 and pages 1 – page 3, line 9 in the specification, which refers to inserting traffic originating from the traffic source onto an interface (see Naito, page 5, line 50: "The test cell inserting unit 101' inserts the generated test cell between the flows of the input cells through the selector 103 in the same manner as the construction of Fig. 3").

In other words, one of the problems encountered by network designers was how to overcome the disadvantage of testing test and traffic data carried using identical data formats. The increasing number of different protocols used require, "in order to be tested, consistency between the information" and several difficulties arise such as the need for interoperability between the installation of the protocol in the systems under test (SET) and in the traffic source (SDT), the impossibility of testing SETs using proprietary protocols, including high costs of providing such testing facilities (specification, page 1, line 20 – page 2, line 9). Naito discloses, as stated above, a monitoring system and method where test data and traffic data have both the same format of ATM cells. As a result, a testing system would have to use a test generator to generate ATM cell formats, and Naito does not disclose a

method to handle proprietary protocols, which is precisely one of the problems that applicant's claim features are directed to address. Therefore, Naito is merely describing the source of applicant's problems, and none of the solution, as provided in applicant's claims.

Consequently, Naito clearly does not disclose nor suggest processing first data units originating from the external network facility so as to recover first packets transported by the first data units, as recited in claim 1, nor a device for inserting traffic for transferring data units transporting packets with a first interface module arranged to receive first data units originating from a network facility and the second interface module arranged to send second data units to a switching system, with multiplexing means for forming a stream of multiplexed packets comprising first packets recovered by the first interface module from the first data units, as recited in claim 8. Although the Office Action proposes that Kloth cures Naito with respect to "generating test traffic carried by second packets of said higher layer protocol", Kloth does not disclose, teach or suggest that first packets are recovered from the first data units, which originate from an external network facility. Therefore, Applicants believe that claim 1 is allowable since Naito does not disclose, teach or suggest the foregoing recovery of first packets from the first data units and Kloth fails to cure this deficiency.

Further, the Examiner states that Naito does not disclose the step of test generating traffic carried by second packets of a higher protocol. However, he states that Kloth provides this missing feature by disclosing the routing of IP packets over an ATM network, which "carry packets of a higher layer protocol." (see office action page 2, subsection 1). The Examiner thus concludes that it would have been obvious to one skilled in the art to use IP packets carried by ATM cells to arrive at applicant's step of test generating traffic carried by second packets of a higher layer protocol because Naito discloses that the payload field could be tested by inserting the IP test packets and monitoring the packets and field for compliance (see office action, page 3, first paragraph).

The Examiner further notes that Naito discloses generating ATM test cells carried by second packets. However, as explained above, Naito discloses a method using ATM test cells which correspond to Test Data Units, whereas claims 1 and 8 recite a method and device directed to using test data packets, and not test data units.

If indeed Kloth teaches the routing of IP packets over an ATM network, it does not follow that either Naito or Kloth describe or suggest the features of claims 1 and 8. Contrary to the Examiner's statements (see page 3, first paragraph), nothing in claims 1 and 8 refer to inserting IP test packets in data units originating for network facilities. Thus, Kloth appears to have no basis or provide no apparent reason for one skilled in the art to modify Naito to render applicant's claims obvious because Kloth is completely silent on the feature of generating test traffic carried by second packets of a higher layer protocol, let alone on recovering first data packets transported by the first data units and multiplexing the first and second packets to form a stream of multiplexed packets.

Moreover, Naito does not disclose, as stated by the Examiner (see official action, page 3) the insertion of IP test packets in ATM cells. Instead, Naito describes the insertion of ATM test cells among a flow of regular ATM cells. Further, none of the other Naito references the Examiner cites (Figures 3, 6, 8, pages 4, lines 39-58 and page 5, lines 1-10, 38-58) describe or suggest this feature recited in claims 1 and 8. Figure 3 merely describes the receiving unit 1ia of Fig. 2 in greater detail, Figure 6 describes the input port of the ATM cross-connecting apparatus in the test cell generating unit 200, and Figure 8 describes the output port connected with each input port of the ATM cross-connecting apparatus.

Therefore, nothing in Kloth or Naito describes or suggests "generating test traffic carried by second packets of said higher layer protocol."

Next, the Examiner states that Naito discloses multiplexing the first and second packets so as to form a stream of multiplexed packets. Again, as explained previously, Naito does not describe or suggest the multiplexing of data packets, but of data units or ATM cells.

In addition, Naito neither describe nor suggest converting the stream of multiplexed packets into second data units, as recited in claims 1 and 8. Instead, Naito discloses that a buffer is used where data units are held for a given time before being sent as to their final destination (Naito, page 5, lines 17-19). Similarly, Naito does not describe nor suggest transmitting the second data units to the switching system as no second data unit is generated and thus no second data unit can be sent to the switching system.

Accordingly, we submit that claims 1 and 8 are patentably distinct and neither Naito nor Kloth, alone or in combination, describes or suggests the features recited in independent claims 1 and 8.

In re Application of Bonjour et al.
Application No. 09/838,466
Response to Office Action of December 2, 2004

Dependent Claims 2-7 and 9-12

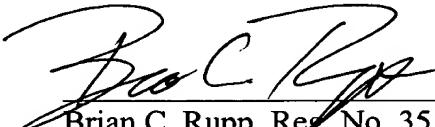
Claims 2-7, which depend from independent claim 1 should be allowed, at least for the reasons set forth above for claim 1. Further, claims 9-12, which depend from independent claim 8 should also be allowed, at least for the reasons set forth above for claim 8.

Accordingly, applicant respectfully submits that the rejection for obviousness based on Naito and Kloth should not be applied for these dependent claims and should be withdrawn.

Conclusion

In view of the foregoing, Applicants submit that claims 1-12 distinguish over the cited references. The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned.

Respectfully submitted,



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Date: March 2, 2005

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CERTIFICATE OF MAILING

I hereby certify that this RESPONSE TO OFFICE ACTION OF DECEMBER 2, 2004 (along with any documents referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Date: March 2, 2005



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